CLAIMS

What is claimed is:

     1.   A method in a data processing system having a workflow comprising a plurality of activities, wherein each of the activities has a duration, and wherein a predecessor one of the plurality of activities occurs before a successor one of the plurality of activities, the method comprising the steps of:

    creating a plan from the workflow, wherein the step of creating the plan comprises the steps of:

        creating a predecessor task from the predecessor activity, wherein the step of creating the predecessor task comprises the steps of:

            receiving an indication of a predecessor start time for the predecessor task;

            setting a predecessor end time for the predecessor task equal to the predecessor duration after the predecessor start time; and

            receiving user input indicating a predecessor resource assigned to the predecessor task; and

        creating a successor task from the successor activity, wherein the step of creating the successor task comprises the steps of:

            setting a successor start time equal to the predecessor end time;

            setting a successor end time equal to the successor duration after the successor start time; and

            receiving user input indicating a successor resource assigned to the successor task;

    receiving an indication to activate the plan;

    activating the plan; and

    monitoring the activated plan, wherein the step of monitoring the activated plan comprises the steps of:

    notifying the predecessor resource to begin the task at the predecessor start time;

    determining when the predecessor task has completed; and

    when it is determined that the predecessor task has completed, notifying the successor resource to begin the successor task.

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2.　　　A method in a data processing system having a workflow comprising a plurality of activities, wherein each of the activities has a duration, and wherein a logic one of the plurality of activities has a condition, the method comprising the steps of:

creating a plan from the workflow, wherein the step of creating the plan comprises the steps of:

creating a logic task from the logic activity, wherein the step of creating the logic task comprises the step of receiving an indication of a start time for the logic task; and

creating a default task from a default one of the plurality of activities, wherein the step of creating the default task comprises the steps of:

setting a default start time equal to the logic start time; and

setting a default end time equal to the default duration after the default start time;

receiving an indication to activate the plan;

activating the plan; and

monitoring the activated plan, wherein the step of monitoring the activated plan comprises the steps of:

determining whether the condition is met; and

when it is determined that the condition is met,

creating a non-default task from a non-default one of the plurality of activities, wherein the step of creating the non-default task comprises the steps of:

setting a non-default start time equal to the logic start time; and

setting a non-default end time equal to the non-default duration after the non-default start time; and

replacing the default task with the non-default task.

3.   A method in a data processing system, comprising the steps of:

creating a workflow that models a process; and

generating a plan from the workflow that represents an instance of the process.

4.   The method of claim 3, further comprising the step of creating a different plan

5   from the workflow.

5.   A method in a data processing system having a workflow that models a process, the method comprising the steps of:

generating a plan from the workflow that reflects an instance of the process; and

activating the plan to perform the instance of the process.

6.   The method of claim 5, further comprising the steps of:

creating a different plan from the workflow; and

activating the different plan.

7.   A method in a data processing system having a virtual file system server connected to a network storage medium, the method comprising the steps of:

> using the virtual file system server to retrieve a workflow from the network storage medium;
>
> creating a plan from the workflow; and
>
> storing the plan on the network storage medium.

8.   The method of claim 7, further comprising the steps of:

creating a different plan from the workflow; and

storing the different plan on the network storage medium.

9.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system comprises a virtual file system server connected to a network storage medium, the method comprising the steps of:

          using the virtual file system server to retrieve an activity having a duration from the network storage medium;

          creating a task from the activity, wherein the step of creating the task comprises the steps of:

          receiving an indication of a start time for the task; and

          setting an end time for the task equal to the duration after the start time; and

          storing the task on the network storage medium.

10.   The computer-readable medium of claim 9, wherein the method further comprises the steps of:

          receiving user input indicating a resource assigned to the task; and

          notifying the resource to begin the task at the start time.

11.   The computer-readable medium of claim 10, wherein the method further comprises the step of receiving an indication that the task has been completed by the resource.

12.   The computer-readable medium of claim 9, wherein the activity further includes an input condition, and wherein the method further comprises the steps of:

          receiving user input indicating a resource assigned to the task;

          determining whether the input condition is met; and

          when it is determined that the input condition is met, notifying the resource to begin the task.

13.   The computer-readable medium of claim 12, wherein the input condition comprises a change to a state of an artifact.

14.   The computer-readable medium of claim 9, wherein the method further comprises the step of displaying the start time and the end time for the task on a timeline.

15.   The computer-readable medium of claim 14, wherein the timeline comprises a Gantt chart.

16.   The computer-readable medium of claim 9, wherein the method further comprises the step of displaying a graphical representation of the activity.

5   17.   The computer-readable medium of claim 16, wherein the graphical representation comprises a flow diagram.

18. A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system comprises an activity with a duration, the method comprising the steps of:

creating a task from the activity, wherein the step of creating the task comprises the steps of:

receiving an indication of a start time for the task; and

setting an end time for the task equal to the duration after the start time; and

creating a different task from the activity, wherein the step of creating the different task comprises the steps of:

receiving an indication of a different start time for the task; and

setting an end time for the task equal to the duration after the different start time.

19. The computer-readable medium of claim 18, wherein the method further comprises the steps of:

receiving user input indicating a resource assigned to the task; and

notifying the resource to begin the task at the start time.

20. The computer-readable medium of claim 19, wherein the method further comprises the step of receiving an indication that the task has been completed by the resource.

21. The computer-readable medium of claim 20, wherein the method further comprises the steps of:

receiving user input indicating a different resource assigned to the different task; and

notifying the different resource to begin the different task at the different start time.

22. The computer-readable medium of claim 21, wherein the method further comprises the step of receiving an indication that the different task has been completed by the different resource.

23.   The computer-readable medium of claim 18, wherein the activity further includes an input condition, and wherein the method further comprises the steps of:

receiving user input indicating a resource assigned to the task;

determining whether the input condition is met; and

when it is determined that the input condition is met, notifying the resource to begin the task.

24.   The computer-readable medium of claim 23, wherein the input condition comprises a change to a state of an artifact.

25.   The computer-readable medium of claim 18, wherein the method further comprises the steps of:

receiving user input indicating a different resource assigned to the different task;

determining whether the input condition is met; and

when it is determined that the input condition is met, notifying the different resource to begin the different task.

26.   The computer-readable medium of claim 18, wherein the method further comprises the step of displaying the start time and the end time for the task on a timeline.

27.   The computer-readable medium of claim 26, wherein the method further comprises the step of displaying the different start time and the end time for the task on a different timeline.

28.   The computer-readable medium of claim 27, wherein the timeline comprises a Gantt chart.

29.   The computer-readable medium of claim 18, wherein the method further comprises the step of displaying a graphical representation of the activity.

30.   The computer-readable medium of claim 29, wherein the graphical representation comprises a flow diagram.

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31.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system comprises an activity with a duration, the method comprising the steps of:

creating a task from the activity, wherein the step of creating the task comprises the steps of:

receiving user input indicating a resource assigned to the task;

receiving an indication of a start time for the task; and

setting an end time for the task equal to the duration after the start time; and

creating a different task from the activity, wherein the step of creating the different task comprises the steps of:

receiving user input indicating a different resource assigned to the different task;

receiving an indication of the start time for the task; and

setting an end time for the different task equal to the duration after the start time.

32.   The computer-readable medium of claim 31, wherein the method further comprises the step of notifying the resource to begin the task at the start time.

33.   The computer-readable medium of claim 32, wherein the method further comprises the step of receiving an indication that the task has been completed by the resource.

34.   The computer-readable medium of claim 33, wherein the method further comprises the step of notifying the different resource to begin the different task at the different start time.

35.   The computer-readable medium of claim 34, wherein the method further comprises the step of receiving an indication that the different task has been completed by the different resource.

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36. The computer-readable medium of claim 31, wherein the activity further includes an input condition, and wherein the method further comprises the steps of:

determining whether the input condition is met; and

when it is determined that the input condition is met, notifying the resource to begin the task.

37. The computer-readable medium of claim 36, wherein the input condition comprises a change to a state of an artifact.

38. The computer-readable medium of claim 36, wherein the method further comprises the step of, when it is determined that the input condition is met, notifying the different resource to begin the different task.

39. The computer-readable medium of claim 31, wherein the method further comprises the step of displaying the start time and the end time for the task on a timeline.

40. The computer-readable medium of claim 39, wherein the method further comprises the step of displaying the start time and the end time for the different task on a different timeline.

41. The computer-readable medium of claim 39, wherein the timeline comprises a Gantt chart.

42. The computer-readable medium of claim 31, wherein the method further comprises the step of displaying a graphical representation of the activity.

43. The computer-readable medium of claim 42, wherein the graphical representation comprises a flow diagram.

44.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system comprises a plurality of activities wherein each of the activities has a duration and wherein a predecessor one of the plurality of activities occurs before a successor one of the plurality of activities, the method comprising the steps of:

creating a predecessor task from the predecessor activity, wherein the step of creating the predecessor task comprises the steps of:

receiving an indication of a start time for the predecessor task; and

setting a predecessor end time for the predecessor task equal to the predecessor duration after the start time; and

creating a successor task from the successor activity, wherein the step of creating the successor task comprises the steps of:

setting a successor start time equal to the predecessor end time; and

setting a successor end time equal to the successor duration after the successor start time.

45.   The computer-readable medium of claim 44, wherein the step of creating the predecessor task further comprises the step of receiving user input indicating a predecessor resource assigned to the predecessor task, and wherein the method further comprises the step of notifying the predecessor resource to begin the predecessor task at the start time.

46.   The computer-readable medium of claim 44, wherein the step of creating the successor task further comprises the step of receiving user input indicating a successor resource assigned to the successor task, and wherein the method further comprises the step of notifying the successor resource to begin the successor task at the successor start time.

47.   The computer-readable medium of claim 44, wherein a different predecessor one of the plurality of activities occurs before the successor activity, and wherein the method further comprises the steps of:

creating a different predecessor task from the different predecessor activity, wherein the step of creating the different predecessor task comprises the steps of:

receiving an indication of a different predecessor start time for the different predecessor task; and

setting a different predecessor end time for the different predecessor task equal to the different predecessor duration after the different predecessor start time.

48.   The computer-readable medium of claim 44, wherein a different successor one of the plurality of activities occurs after the predecessor activity, and wherein the method further comprises the steps of:

creating a different successor task from the different successor activity, wherein the step of creating the different successor task comprises the steps of:

receiving an indication of a different successor start time for the different successor task; and

setting a different successor end time for the different successor task equal to the different successor duration after the different successor start time.

49.   The computer-readable medium of claim 44, wherein the predecessor task comprises a predecessor input condition, and wherein the method further comprises the steps of:

receiving user input indicating a predecessor resource assigned to the predecessor task;

determining whether the predecessor input condition is met; and

when it is determined that the predecessor input condition is met, notifying the predecessor resource to begin the predecessor task.

50.   The computer-readable medium of claim 44, wherein the predecessor task further comprises a predecessor output condition, and wherein the method further comprises the steps of:

receiving user input indicating a successor resource assigned to the successor task;

determining whether the predecessor output condition is met; and

when it is determined that the predecessor output condition is met, notifying the successor resource to begin the successor task.

51.   The computer-readable medium of claim 44, wherein the successor task comprises a successor input condition, and wherein the method further comprises the steps of:

receiving user input indicating a successor resource assigned to the successor task;

determining whether the successor input condition is met; and

when it is determined that the successor input condition is met, notifying the successor resource to begin the successor task.

52.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system comprises a plurality of activities wherein each of the activities has a duration and wherein one of the plurality of activities and another of the plurality of activities start and end at a same time, the method comprising the steps of:

creating a task from the activity, wherein the step of creating the task comprises the steps of:

receiving an indication of a start time for the task; and

setting an end time for the task equal to the duration after the start time; and

creating another task from the other activity, wherein the step of creating the other task comprises the steps of:

setting another start time for the other task equal to the start time for the task; and

setting another end time equal to the other duration after the start time.

53.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the method comprising the steps of:

creating a workflow that models a process; and

generating a plan from the workflow that represents an instance of the process.

54.   The computer-readable medium of claim 53, wherein the method further comprises the step of generating a different plan from the workflow.

55.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system comprises a workflow that models a process, the method comprising the steps of:

generating a plan from the workflow that reflects an instance of the process; and

5   activating the plan to perform the instance of the process.

56.   The computer-readable medium of claim 55, wherein the method further comprises the steps of:

generating a different plan from the workflow; and

activating the different plan.

57.   A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system comprises a virtual file system server connected to a network storage medium, the method comprising the steps of:

using the virtual file system server to retrieve a workflow from the network storage medium;

generating a plan from the workflow; and

storing the plan on the network storage medium.

58.   The computer-readable medium of claim 57, wherein the method further comprises the steps of:

generating a different plan from the workflow; and

storing the different plan on the network storage medium.

59.   A data processing system comprising:

a network storage medium;

a memory device further comprising a program that creates a workflow that models a process, that generates a plan from the workflow that represents an instance of the process, and that stores the workflow and the plan on the network storage medium; and

a processor for running the program.

60.   The data processing system of claim 59, wherein the workflow comprises a plurality of activities, and wherein when the program generates the plan from the workflow, the program creates a plurality of tasks from the plurality of activities.

61.   The data processing system of claim 60, wherein each activity has a duration, and wherein when the program creates the plurality of tasks from the plurality of activities, the program receives an indication of a start time for each task and sets an end time for each task equal to the corresponding duration of the activity after the corresponding start time.

62.   The data processing system of claim 61, wherein the program further activates the plan, wherein when the program activates the plan, for each task of the plan, the program notifies a resource assigned to the task to begin the task.

63.   The data processing system of claim 59, wherein the program further creates a different plan from the workflow, and stores the different plan on the network storage medium.

64.   A system comprising:

means for creating a workflow that models a process; and

means for generating a plan from the workflow that represents an instance of the process.